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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/813,165

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Denis Babin

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CANADA

EXAMINER

BODAWALA, DIMPLE N

ART UNIT

PAPER NUMBER

1722

MAIL DATE

DELIVERY MODE

05/11/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/813,165	Applicant(s) BABIN, DENIS	
	Examiner Dimple N. Bodawala	Art Unit 1722	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 April 2007.
 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 and 17-19 is/are pending in the application.
 4a) Of the above claim(s) 13-16 is/are withdrawn from consideration.
 5) ☐ Claim(s) _____ is/are allowed.
 6) ☒ Claim(s) 1-12 and 17-19 is/are rejected.
 7) ☐ Claim(s) _____ is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☒ The drawing(s) filed on 31 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>6/19/2006, 11/30/2005, 8/11/2004</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Claims 13-16 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected a method for injecting melt stream into a mold, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on April 17th, 2007.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1,3,7,9,11-12, and 17-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Dewar et al. (U S Patent No. 6,348,171; cited by applicant in IDS).

Dewar ('171) discloses the injection molding apparatus which comprises the injection molding machine including the machine nozzle for injecting a melt stream and a machine platen; a manifold (20) having a melt inlet (120) and a melt channel

(124,126) for distributing the melt stream (See col.4 lines 36-67).

It further teaches about an anti-drool mechanism (10) partially disposed within the machine platen including a melt passage (14), a fixed pin (11) disposed within the melt passage (14) and sized so that the melt stream flows around the pin (11), the pin having head portion configured to be received within the machine nozzle (130) (See figure 3); and an actuated shut off collar (32) is disposed partially within the melt passage (14) and surrounding the pin (11), the shut-off collar (32) and the head portion of the pin (11) configured to control the flow of the melt stream through the melt passage (14), wherein the melt passage (14) is divided into the multiple melt passage (124, 126) adjacent to the manifold melt inlet (128), and the shut-off collar (32) is mechanically actuated when the pin head portion is received within the machine nozzle (See col.4 lines 36-67).

It is further teaches that the engagement of the retractable machine nozzle with the shut-off collar causes the shut-off collar to retract and allow flow of the melt stream between the machine nozzle and the melt passage (See col.5 lines 63-67 through col.6 lines 1-47). It further teaches that the sprue bushing (34) disposed partially within the machine platen,

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wherein the bushing (34) having the melt passage that is in the fluid communication with the manifold inlet (See figures 1 and 2).

Dewar ('171) discloses all the claimed structural limitations, and, thus, the claims are anticipated.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3, and 5-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Olaru (U S Patent No. 7,182,893).

Olaru ('893) discloses the injection molding apparatus which comprises the injection molding machine (10) including a machine nozzle for injecting a melt stream (See col.2 lines 32-34), and a machine platen (figures 1 and 2); a manifold (12) having a melt inlet (18) and a melt channel (22) for distributing the melt stream (See col.2 lines 31-40); and an anti-drool mechanism disposed within the machine platen (See figure 1) which comprises a melt passage (30), a fixed valve pin (11) disposed within the melt passage (30) and sized so that the

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melt stream flows around the pin (See ol.1 lines 45-47; and col.3 lines 58-61), pin (11) having the head portion (55) configured to be received within the machine nozzle (See figure 1); and an actuated shut-off collar (38) disposed at least partially within the melt passages (30) and surrounding the pin (11), the shut off collar (38) and the head portion (55) of the pin (11) configured to control the flow of the melt stream through the melt passage (30) (See col.3 lines 1-15).

It further teaches that the shut off collar (38) is spring loaded (See figure 1), where in the shut off collar (38) is mechanically actuated when the pinhead portion (55) is received within the machine nozzle (See figure 1, col.3 lines 35-43). It further teaches that the shut off collar (38) is actuated using anyone of a hydraulic, electromechanical and mechanical apparatus (See col.4 lines 25-27; col.5 lines 66-67; and col.6 lines 42-46). It further teaches that the injection molding apparatus (10) comprises the machine nozzle, which is not shown in the figure but discloses by the specification, thus inherently it also teaches about the locating ring configured to allow the machine nozzle to pass there through and to guide the movement of the shut-off collar (38) as recited in claim 6. Figure 7 teaches that the melt passage (30) is divided into multiple melt passages (30i, and 30j) to the manifold (12) melt

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inlet (18). It further teaches that the machine nozzle injects the melt stream into a cold runner system (37) (See col.2 lines 52-57).

It further teaches that the engagement of the retractable machine nozzle with the shut-off collar (38) causes the shut-off collar (38) to retract and allow flow of the melt stream between the machine nozzle and the melt passage (30) (See col.2 lines 41-63).

Olaru ('893) discloses all the claimed structural limitations, and, thus, the claims are anticipated.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

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1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 4 and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Olaru (893) in view of Dray, Sr. (U S Patent No. 6,413,076).

Olaru ('893) discloses all claimed structural limitations as discussed above, but does not disclose the pneumatic actuator and a sprue bushing.

In the analogous art, Dray, Sr. ('076) discloses the injection molding apparatus which comprises the injection units such as nozzle, which mates with a depression formed in a portion of the mold, which is called the sprue bushing (17), wherein the sprue bushing (17) is disposed partially within the machine platen, and having the a melt passage that is in fluid communication with the manifold inlet (See col.1 lines 26-30, 55-60; col.3 lines 25-63). It further teaches that the shut-off collar is actuated using a pneumatic, mechanical and hydraulic apparatus (actuators) (See col.2 lines 14-17).

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the invention of Olaru ('893) with the sprue bushing and the pneumatic

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actuator because pneumatic actuator involves to control the shut-off valve which is used to halt or stop material flow from an injection unit into the mold portion of the injection molding apparatus (See col.1 lines 7-10), and the sprue bushing guides the injection unit during the molding process (See col.1 lines 20-25) as suggested by Dray, Sr. ('076).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

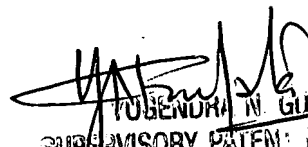
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dimple N. Bodawala whose telephone number is (571) 272-6455. The examiner can normally be reached on Monday - Friday at 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Yogendra N. Gupta can be reached on (571) 272-1316. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DNB



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